

REMARKS

This is in response to the Office Action mailed June 1, 2007. In the Office Action, all claims 1-5 and 7-34 were pending and rejected. With this response, no claims are amended and claims are presented for reconsideration and allowance.

Section Five of the Office Action indicated that independent claim 1 among others, was rejected under 35 U.S.C. §103(a) as being unpatentable over Warshavsky et al. (U.S. Patent 6,732,095 - hereinafter Warshavsky) in view of Krupa (U.S. Patent 6,915,304) and further in view of Nelson (U.S. Patent 6,112,199).

As a threshold matter, Applicants continue to note that U.S. Patent 6,732,095 appears to be referred to by the Office Action alternatively as Warshavsky, Earsharsky and Varshavsky. Applicants respectfully believe that is merely typographical error, and will refer to U.S. Patent 6,732,095 as Warshavsky.

Warshavsky provides a method and apparatus for mapping between XML and relational representations. As set forth in column 3, lines 39-41, "The flexible XML system has a metadata schema that permits the definition of mappings between a relational data representation and XML documents." Further, "Once the mapping definition is created, a software component known as the XML Converter, can be used for automatic conversion between XML documents and relational data." Column 4, lines 13-16. Thus, Warshavsky essentially provides mapping and conversion between relational data and XML documents.

Krupa provides a system and method for converting an XML data structure into a relational database. The system of Krupa provides a method of forming a relational database from an Extensible Markup Language (XML) document. Column 2, lines 54-56. Moreover, Krupa generally aims to provide the advantage of representing object data as XML in a relational database in such a way that would not require recursive querying while still maintaining the benefits of a general (non-changing) data model that still maintains the structure of individual components. Column 2, lines 46-51.

The rejection of claim 1 relies, at least in part, upon the hypothetical combination of Warshavsky and Krupa. More particularly, the Office Action employs the Warshavsky

teaching for providing every component of independent claim 1 with the exception of two features. Specifically, the Office Action concedes that Warshavsky does not teach "synchronizing a structure of an intermediate database system with the extensible destination system." The Office Action also appears to concede that Warshavsky does not teach the "extension table." The Office Action then turns to the Krupa and Nelson references to supply the first and second features, respectively. The Office Action then asserts that,

"It would have obvious to a person of ordinary skill in the art at the time the invention was made, to apply Krupa's teaching of converting or synchronizing between a relational database with an XML data structure and Nelson teaches extension table to Varshavsky's [SIC] system in order to provide techniques that would rely on a general data mode for storage that does not change as the object model changes, to provide fast search information about specific individual components with an XML document via simple queries that do not require hierarchy traversals or intensive, post-query data parsing (abstract, col. 2, lines 35-50) and further allow users to extend tables in a relational database for storing values or definitions of associated with new attributes in the attribute table."

The 127-word sentence listed above does not make sense. At best, the sentence uses vague advantages provided in Krupa's abstract to support, in a decidedly conclusory manner, the combination of the teachings of Krupa and Nelson with Warshavsky. However, there is no reasonable nexus between the feature alleged by the Office Action to be taught by Krupa (synchronization a structure of an intermediate database system with the extensible destination system, wherein the intermediate database system includes an entity extension table) and the purported advantages provided by using such a feature. Further still, it is logically inconsistent to assert, on the one hand, that one of the reasons for combining the teachings of Krupa with those of Warshavsky is to provide a relational data model that does not change, but then add another element (from Nelson) that specifically includes an entity extension table. Put simply, Applicants respectfully submit that the proffered reasoning to combine the teachings of these three references fails to satisfy the requirements recently elucidated by the United States Supreme Court. "Rejections on obviousness grounds can not be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR International Co. v. Teleflex Inc., 82

U.S.P.Q. 2d 1385, 1396 (US Sup. Ct. 2007) (citing In re Kahn, 78 U.S.P.Q. 2d 1329 (Fed. Cir. 2006)). Further, the Supreme Court confirmed, "when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obviousness." Id at 1395. Thus, not only does the rationale given to support the combination fail to teach satisfy the Supreme Court's requirements, the references themselves actually teach away from one another by providing, on the one hand, a non-changing data model, and on the other hand, a reference (Nelson) that is alleged to provide the extension table.

Notwithstanding the important reasons set forth above why combining the teachings of Krupa and Nelson with those of Warshavsky is improper, Applicants respectfully submit that Krupa, does not in fact, teach the subject matter which the Office Action asserts. Specifically, on Page Three of the Office Action, the Examiner concedes that Warshavsky does not explicitly teach the "synchronizing a structure of an intermediate database system with the extensible destination system." The Office Action then paraphrases a portion of Krupa's abstract which is silent on such synchronization, and then erroneously characterizes Krupa's teaching as "converting or synchronizing between a relational database with an XML data structure." However, Krupa is clearly directed to providing a relational database structure that has a general, non-changing data model. See column 2, line 49. Further, it is noted that any XML data structure can be set forth in the relational table illustrated in FIG. 2. Thus, the XML database structure is transformed into relational database data. The XML structure does not bear upon nor impact the structure of the relational database itself. Accordingly, Applicants respectfully submit that even if the teachings of Warshavsky and Krupa could be combined, the hypothetical combination would still fail to reach the subject matter of independent claims.

Notwithstanding all of the reasons above with respect to the various deficiencies of the primary combination, Applicants further respectfully submit that the Office Action's characterization of the Nelson reference is erroneous. Specifically, the Final Office Action asserted that Nelson teaches an extension table at column 6, lines 45-50. Column 6, lines 45-50 of Nelson simply discuss a method of table extension known as "relation-valued attributes." The technique employs a "EXTEND" command employed during the execution of a database request

to extend database tables. Additional derived data items (to which Nelson is primarily focused) may be included in the table extension. However, "The new data items are conceptual, however, and are not actually added to the original database table." There is no indication that the extending command actually provides anything resembling an entity extension table as set forth in amended independent claim 1. Moreover, the alleged reason provided by the Office Action for combining the teachings of Nelson with those of Warshavsky and Krupa is given as a portion of the 126-word sentence quoted above. Specifically, the alleged reason for combining the Nelson reference with the Warshavsky and Krupa references is apparently "and Nelson teaches extension table to Warshavsky's [SIC] system...." Applicants also respectfully submit that there is insufficient rationale to support the combination of the Nelson reference with the Warshavsky and Krupa references.

Accordingly, Applicants respectfully submit that independent claim 1 is allowable over Warshavsky, Krupa and Nelson, taken alone or in combination. Moreover, Applicants respectfully submit that dependent claims 2-5 and 7-19 are allowable as well by virtue of their dependency, either directly or indirectly, from allowable amended independent claim 1.

Section Thirteen of the Office Action indicated that independent claim 20, among others, was rejected under 35 U.S.C. §103(a) as being unpatentable over Warshavsky in view of Krupa. Applicants respectfully submit that independent claim 20 is allowable over the Warshavsky/Krupa combination because Krupa does not actually teach the subject matter that the Office Action relies upon, and, the combination of the Krupa and Warshavsky references is improper, as described above. Accordingly, Applicants respectfully submit that claims 20-34 are allowable over Warshavsky and Krupa, taken alone or in combination.

Section Nineteen of the Office Action indicated that independent claim 20, among others, was rejected under 35 U.S.C. §103(a) as being unpatentable over Warshavsky in view of Egilsson et al. (U.S. Patent Publication 2003/0023608 A1 - hereinafter Egilsson). Section Nineteen of the Office Action again concedes, "Warshavsky [SIC] does not explicitly teach the claimed limitation 'synchronizing the structure of the intermediate database system with the destination system.'" The Office Action then alleges that Egilsson "Teaches converting

structures into schemas (paragraph 0113, FIG. 10).” Applicants respectfully submit that the Office Action has failed to indicate how the alleged conversion of structures into schemas allegedly taught by Egilsson satisfies the requirement of providing the claimed limitation “synchronizing the structure of the intermediate database system with the destination system.” Accordingly, Applicants respectfully submit that independent claim 20 is allowable over Warshavsky and Egilsson, taken alone or in combination. Additionally, Applicants respectfully submit that dependent claims 21-34 are allowable as well by virtue of their dependency, either directly or indirectly, from an allowable independent claim.

In conclusion, Applicants respectfully submit that the entire application is now in condition for allowance. Reconsideration and favorable action are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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